

NOTES FOR DQA TEAM'S UN-DUPLICATED
USERPOP SPREADSHEETS

These spreadsheets use the "frozen" 1998 Active Indian data in the NPIRS' USERPOP database table. We have been able to match most numbers (within a few cases) except for two areas – as can be seen in the following table.

AREA	Official	NPIRS table	Difference
ABERDEEN	117,017	117,017	0
ALASKA	111,252	111,252	0
ALBUQUERQUE	85,400	85,398	-2
BEMIDJI	80,212	80,208	-4
BILLINGS	69,068	69,059	-9
CALIFORNIA	63,457	67,170	+3,713
NASHVILLE	37,054	37,058	+4
NAVAJO	253,382	253,375	-7
OKLAHOMA	300,272	300,376	+104
PHOENIX	135,590	135,590	0
PORTLAND	87,491	87,491	0
TUCSON	23,172	23,172	0

There also appear to be some additional, relatively small ongoing fluctuations in the above user pop numbers not reflected in this table. Although these fluctuations do not appear to significantly affect the final numbers, we would like to better understand why and how they occur.

We are investigating these differences, but we use these data "AS IS" for the present time. That is, we use data from the NPIRS' table in order to un-duplicate the I.H.S. Active Indian User Population figures.

An attempt has been made to "fix" a number of known problems that exist for the 1998 User Population figures. In our spreadsheets, we present the effect of these fixes on the 1998 User Population numbers. These numbers include the following fixes that were applied to the database on May 28, 2001.

- (1) FY96-98 master file re-load of APC data. The previous load had a reading frame error, which resulted in values for SSN and several other fields being loaded incorrectly. The effect of correcting this is to decrease slightly the APC workload counts and increase slightly the active user counts (see item #45 on Data Issues list on the DQA team Internet web site for a more complete explanation).

- (2) Charts that belonged to non-existent patients were deleted and then visits re-linked. The effect of this is that some visits that had been linked to non-existent patients are now linked to people guaranteed to exist making the number of active patients rise.
- (3) ONE chart per patient was added for most of the patients who had none. Alaska still has about 500 patients with no charts. Where those charts happen to be in area 39, Alaska will see a drop in total registrants along with their potentially actives. Across the board, however, visits may now be able to link and activate a few more people.
- (4) FY97-99 workload (excluding dental data) was re-linked after corrections (2) and (3) above. The linkers were changed to include an "order by" clause. Before this change, more people were flagged "active" than should have been the case. This is because, for example, 3 people (probably duplicates) could have the same chart number. If there are 3 visits for that chart number, each could be activating a different person. The "order by" clause will require the same person to always be linked to a specific chart. It will decrease the number of actives across the board.
- (5) Three previously missing demographic records were added. One duplicate demographic record was deleted.
- (6) Because of an RPMS issue, 99/unknown residence codes in registration data are changed to reflect the residence code from an appropriately timed visit.

OTHER KNOWN ISSUES:

- We are investigating the differences between the "official" and the "frozen" data in the NPIRS table for California and Oklahoma. We will post what we discover on the DQA Team web site.
- Un-duplication is conducted in two ways – (1) just removing duplicate social security numbers; and (2) an EXACT match on four fields: SSN, date of birth, last name and first name. We remove blank and null social security numbers from the duplicate analysis (spreadsheets that follow) to ensure that "blank" social security numbers are not matched to "blank" social security numbers. However, the effect of doing this is to potentially reward areas for not collecting social security numbers. This is because these SSNs are added back into the final user pop figures without un-duplication. We ask if this is an appropriate way to proceed?

- There are unusual patterns present for California and Nashville. Both areas have experienced a drop in user population figures for the years 98-00 as compared to the years 93-97. Both of these areas rely on contract health services to a fairly significant extent. We are investigating the effect of low CHS counts for FY97 and FY98 on their user population figures.

Comments and questions are welcomed! Please feel free to contact any member of the DQA Team.

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SSN Unduplication
 Unique SSN Analysis for FY1998, FY1999, and FY2000
 Analysis Uses SSN as a Unique Identifier (Excludes all duplicate SSNs)

CALIFORNIA	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	67,170		68,111		67,320		63,809		1993	59,284	
Missing SSNs	4,158	6.2%	3,102	4.6%	3,390	5.0%	3,470	5.4%	1994	62,748	5.8%
Non-miss SSN Act Ind	63,012		65,009		63,930		60,339		1995	64,340	2.5%
									1996	63,624	-1.1%
Duplicate SSNs	2,163	3.4%	1,860	2.9%	1,929	3.0%	1,885	3.1%	1997	63,210	-0.7%
Non-dup, Non-miss SSN	60,849		63,149		62,001		58,454		1998	66,251	4.8%
Add back missing	65,007	-3.2%	66,251	-2.7%	65,391	-2.9%	61,924	-3.0%	1999	65,391	-1.3%
FINAL USER POP	65,007		66,251		65,391		61,924		2000	61,924	-5.3%
										Avg Annual Chg 93-97	1.7%
										Avg Annual Chg 98-00	-3.3%

NASHVILLE	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	37,058		36,666		33,322		33,784		1993	34,806	
Missing SSNs	2,036	5.5%	1,333	3.6%	1,268	3.8%	1,527	4.5%	1994	36,446	4.7%
Non-miss SSN Act Ind	35,022		35,333		32,054		32,257		1995	37,235	2.2%
									1996	37,042	-0.5%
Duplicate SSNs	154	0.4%	277	0.8%	324	1.0%	347	1.1%	1997	36,766	-0.7%
Non-dup, Non-miss SSN	34,868		35,056		31,730		31,910		1998	36,389	-1.0%
Add back missing	36,904	-0.4%	36,389	-0.8%	32,998	-1.0%	33,437	-1.0%	1999	32,998	-9.3%
FINAL USER POP	36,904		36,389		32,998		33,437		2000	33,437	1.3%
										Avg Annual Chg 93-97	1.4%
										Avg Annual Chg 98-00	-4.1%

SSN Unduplication
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NAVAJO	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	253,375		256,445		257,493		256,209		1993	230,974	
Missing SSNs	11,825	4.7%	5,571	2.2%	6,608	2.6%	8,176	3.2%	1994	231,926	0.4%
Non-miss SSN Act Ind	241,550		250,874		250,885		248,033		1995	233,094	0.5%
									1996	233,690	0.3%
Duplicate SSNs	28,679	11.9%	33,425	13.3%	32,744	13.1%	31,319	12.6%	1997	234,868	0.5%
Non-dup, Non-miss SSN	212,871		217,449		218,141		216,714		1998	223,020	-5.0%
Add back missing	224,696	-11.3%	223,020	-13.0%	224,749	-12.7%	224,890	-12.2%	1999	224,749	0.8%
FINAL USER POP	224,696		223,020		224,749		224,890		2000	224,890	0.1%
										Avg Annual Chg 93-97	0.4%
										Avg Annual Chg 98-00	0.4%

OKLAHOMA	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	300,376		312,401		317,277		319,679		1993	257,421	
Missing SSNs	11,322	3.8%	7,490	2.4%	9,141	2.9%	11,269	3.5%	1994	264,698	2.8%
Non-miss SSN Act Ind	289,054		304,911		308,136		308,410		1995	268,846	1.6%
									1996	274,913	2.3%
Duplicate SSNs	39,360	13.6%	42,816	14.0%	43,593	14.1%	43,581	14.1%	1997	280,450	2.0%
Non-dup, Non-miss SSN	249,694		262,095		264,543		264,829		1998	269,585	-3.9%
Add back missing	261,016	-13.1%	269,585	-13.7%	273,684	-13.7%	276,098	-13.6%	1999	273,684	1.5%
FINAL USER POP	261,016		269,585		273,684		276,098		2000	276,098	0.9%
										Avg Annual Chg 93-97	2.2%
										Avg Annual Chg 98-00	1.2%

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PORTLAND	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	87,491		87,205		89,064		90,972		1993	74,594	
Missing SSNs	4,177	4.8%	2,571	2.9%	3,202	3.6%	3,944	4.3%	1994	76,753	2.9%
Non-miss SSN Act Ind	83,314		84,634		85,862		87,028		1995	77,443	0.9%
									1996	80,013	3.3%
Duplicate SSNs	3,366	4.0%	2,922	3.5%	2,871	3.3%	2,803	3.2%	1997	81,900	2.4%
Non-dup, Non-miss SSN	79,948		81,712		82,991		84,225		1998	84,283	2.9%
Add back missing	84,125	-3.8%	84,283	-3.4%	86,193	-3.2%	88,169	-3.1%	1999	86,193	2.3%
FINAL USER POP	84,125		84,283		86,193		88,169		2000	88,169	2.3%
										Avg Annual Chg 93-97	2.4%
										Avg Annual Chg 98-00	2.3%

TUCSON	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	23,172		22,540		23,030		23,357		1993	19,707	
Missing SSNs	1,989	8.6%	1,239	5.5%	1,415	6.1%	1,651	7.1%	1994	20,662	4.8%
Non-miss SSN Act Ind	21,183		21,301		21,615		21,706		1995	21,474	3.9%
									1996	22,463	4.6%
Duplicate SSNs	1,200	5.7%	622	2.9%	646	3.0%	611	2.8%	1997	20,843	-7.2%
Non-dup, Non-miss SSN	19,983		20,679		20,969		21,095		1998	21,918	5.2%
Add back missing	21,972	-5.2%	21,918	-2.8%	22,384	-2.8%	22,746	-2.6%	1999	22,384	2.1%
FINAL USER POP	21,972		21,918		22,384		22,746		2000	22,746	1.6%
										Avg Annual Chg 93-97	1.4%
										Avg Annual Chg 98-00	1.9%

SSN Unduplication
 Unique SSN Analysis for FY1998, FY1999, and FY2000
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PHOENIX	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	135,590		126,699		130,361		133,495		1993	114,202	
Missing SSNs	9,529	7.0%	5,784	4.6%	6,838	5.2%	8,317	6.2%	1994	116,518	2.0%
Non-miss SSN Act Ind	126,061		120,915		123,523		125,178		1995	118,526	1.7%
									1996	123,017	3.8%
Duplicate SSNs	9,960	7.9%	2,942	2.4%	2,759	2.2%	2,633	2.1%	1997	126,085	2.5%
Non-dup, Non-miss SSN	116,101		117,973		120,764		122,545		1998	123,757	-1.8%
Add back missing	125,630	-7.3%	123,757	-2.3%	127,602	-2.1%	130,862	-2.0%	1999	127,602	3.1%
FINAL USER POP	125,630		123,757		127,602		130,862		2000	130,862	2.6%
										Avg Annual Chg 93-97	2.6%
										Avg Annual Chg 98-00	2.9%

ABERDEEN	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	117,017		119,346		121,411		121,841		1993	104,443	
Missing SSNs	7,192	6.1%	4,846	4.1%	5,701	4.7%	6,751	5.5%	1994	107,237	2.7%
Non-miss SSN Act Ind	109,825		114,500		115,710		115,090		1995	108,745	1.4%
									1996	111,389	2.4%
Duplicate SSNs	7,220	6.6%	9,281	8.1%	9,355	8.1%	8,893	7.7%	1997	112,384	0.9%
Non-dup, Non-miss SSN	102,605		105,219		106,355		106,197		1998	110,065	-2.1%
Add back missing	109,797	-6.2%	110,065	-7.8%	112,056	-7.7%	112,948	-7.3%	1999	112,056	1.8%
FINAL USER POP	109,797		110,065		112,056		112,948		2000	112,948	0.8%
										Avg Annual Chg 93-97	1.9%
										Avg Annual Chg 98-00	1.3%

SSN Unduplication
 Unique SSN Analysis for FY1998, FY1999, and FY2000
 Analysis Uses SSN as a Unique Identifier (Excludes all duplicate SSNs)

ALASKA	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	111,252		122,533		128,493		128,292		1993	86,988	
Missing SSNs	7,820	7.0%	3,660	3.0%	4,750	3.7%	5,640	4.4%	1994	94,515	8.7%
Non-miss SSN Act Ind	103,432		118,873		123,743		122,652		1995	97,545	3.2%
									1996	101,699	4.3%
Duplicate SSNs	12,408	12.0%	14,515	12.2%	16,870	13.6%	15,354	12.5%	1997	104,412	2.7%
Non-dup, Non-miss SSN	91,024		104,358		106,873		107,298		1998	108,018	3.5%
Add back missing	98,844	-11.2%	108,018	-11.8%	111,623	-13.1%	112,938	-12.0%	1999	111,623	3.3%
FINAL USER POP	98,844		108,018		111,623		112,938		2000	112,938	1.2%
										Avg Annual Chg 93-97	5.0%
										Avg Annual Chg 98-00	2.3%

ALBUQUERQUE	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	85,398		85,193		86,322		87,935		1993	75,844	
Missing SSNs	2,804	3.3%	1,088	1.3%	1,451	1.7%	1,957	2.2%	1994	78,378	3.3%
Non-miss SSN Act Ind	82,594		84,105		84,871		85,978		1995	79,641	1.6%
									1996	80,554	1.1%
Duplicate SSNs	6,729	8.1%	7,264	8.6%	7,071	8.3%	6,938	8.1%	1997	81,052	0.6%
Non-dup, Non-miss SSN	75,865		76,841		77,800		79,040		1998	77,929	-3.9%
Add back missing	78,669	-7.9%	77,929	-8.5%	79,251	-8.2%	80,997	-7.9%	1999	79,251	1.7%
FINAL USER POP	78,669		77,929		79,251		80,997		2000	80,997	2.2%
										Avg Annual Chg 93-97	1.7%
										Avg Annual Chg 98-00	2.0%

SSN Unduplication
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 Analysis Uses SSN as a Unique Identifier (Excludes all duplicate SSNs)

BEMIDJI	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	80,208		80,614		82,723		84,446		1993	62,057	
Missing SSNs	3,710	4.6%	2,172	2.7%	2,802	3.4%	3,738	4.4%	1994	66,262	6.8%
Non-miss SSN Act Ind	76,498		78,442		79,921		80,708		1995	69,576	5.0%
									1996	73,894	6.2%
Duplicate SSNs	2,173	2.8%	2,833	3.6%	2,942	3.7%	2,846	3.5%	1997	76,199	3.1%
Non-dup, Non-miss SSN	74,325		75,609		76,979		77,862		1998	77,781	2.1%
Add back missing	78,035	-2.7%	77,781	-3.5%	79,781	-3.6%	81,600	-3.4%	1999	79,781	2.6%
FINAL USER POP	78,035		77,781		79,781		81,600		2000	81,600	2.3%
										Avg Annual Chg 93-97	5.7%
										Avg Annual Chg 98-00	2.5%

BILLINGS	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	69,059		66,130		66,853		67,743		1993	60,021	
Missing SSNs	2,562	3.7%	1,211	1.8%	1,569	2.3%	1,998	2.9%	1994	61,528	2.5%
Non-miss SSN Act Ind	66,497		64,919		65,284		65,745		1995	62,395	1.4%
									1996	63,446	1.7%
Duplicate SSNs	4,435	6.7%	1,917	3.0%	1,890	2.9%	1,880	2.9%	1997	64,780	2.1%
Non-dup, Non-miss SSN	62,062		63,002		63,394		63,865		1998	64,213	-0.9%
Add back missing	64,624	-6.4%	64,213	-2.9%	64,963	-2.8%	65,863	-2.8%	1999	64,963	1.2%
FINAL USER POP	64,624		64,213		64,963		65,863		2000	65,863	1.4%
										Avg Annual Chg 93-97	2.0%
										Avg Annual Chg 98-00	1.3%

EXACT Unduplication Analysis for FY1998, FY1999, and FY2000
EXACT: SSN, Date of Birth, Last Name, and First Name
Analysis Excludes Missing SSNs from Unduplication Analysis

CALIFORNIA	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	67,170		68,111		67,320		63,809		1993	59,284	
Missing SSNs	4,158	6.2%	3,102	4.6%	3,390	5.0%	3,470	5.4%	1994	62,748	5.8%
Non-miss SSN Act Ind	63,012		65,009		63,930		60,339		1995	64,340	2.5%
EXACT Duplicates	738	1.2%	445	0.7%	463	0.7%	420	0.7%	1996	63,624	-1.1%
Non-dup, Non-miss SSN	62,274		64,564		63,467		59,919		1997	63,210	-0.7%
Add back missing	66,432	-1.1%	67,666	-0.7%	66,857	-0.7%	63,389	-0.7%	1998	67,666	7.0%
FINAL USER POP	66,432		67,666		66,857		63,389		1999	66,857	-1.2%
									2000	63,389	-5.2%
										Avg Annual Chg 93-97	1.7%
										Avg Annual Chg 98-00	-3.2%

NASHVILLE	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	37,058		36,666		33,322		33,784		1993	34,806	
Missing SSNs	2,036	5.5%	1,333	3.6%	1,268	3.8%	1,527	4.5%	1994	36,446	4.7%
Non-miss SSN Act Ind	35,022		35,333		32,054		32,257		1995	37,235	2.2%
EXACT Duplicates	66	0.2%	48	0.1%	46	0.1%	53	0.2%	1996	37,042	-0.5%
Non-dup, Non-miss SSN	34,956		35,285		32,008		32,204		1997	36,766	-0.7%
Add back missing	36,992	-0.2%	36,618	-0.1%	33,276	-0.1%	33,731	-0.2%	1998	36,618	-0.4%
FINAL USER POP	36,992		36,618		33,276		33,731		1999	33,276	-9.1%
									2000	33,731	1.4%
										Avg Annual Chg 93-97	1.4%
										Avg Annual Chg 98-00	-3.9%

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Non-miss SSN Act Ind	241,550		250,874		250,885		248,033		1995	233,094	0.5%
									1996	233,690	0.3%
EXACT Duplicates	11,966	5.0%	13,713	5.5%	13,999	5.6%	13,549	5.5%	1997	234,868	0.5%
Non-dup, Non-miss SSN	229,584		237,161		236,886		234,484		1998	242,732	3.3%
Add back missing	241,409	-4.7%	242,732	-5.3%	243,494	-5.4%	242,660	-5.3%	1999	243,494	0.3%
FINAL USER POP	241,409		242,732		243,494		242,660		2000	242,660	-0.3%
										Avg Annual Chg 93-97	0.4%
										Avg Annual Chg 98-00	-0.0%

OKLAHOMA	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	300,376		312,401		317,277		319,679		1993	257,421	
Missing SSNs	11,322	3.8%	7,490	2.4%	9,141	2.9%	11,269	3.5%	1994	264,698	2.8%
Non-miss SSN Act Ind	289,054		304,911		308,136		308,410		1995	268,846	1.6%
									1996	274,913	2.3%
EXACT Duplicates	23,447	8.1%	20,665	6.8%	21,252	6.9%	20,797	6.7%	1997	280,450	2.0%
Non-dup, Non-miss SSN	265,607		284,246		286,884		287,613		1998	291,736	4.0%
Add back missing	276,929	-7.8%	291,736	-6.6%	296,025	-6.7%	298,882	-6.5%	1999	296,025	1.5%
FINAL USER POP	276,929		291,736		296,025		298,882		2000	298,882	1.0%
										Avg Annual Chg 93-97	2.2%
										Avg Annual Chg 98-00	1.2%

EXACT Unduplication Analysis for FY1998, FY1999, and FY2000
EXACT: SSN, Date of Birth, Last Name, and First Name
Analysis Excludes Missing SSNs from Unduplication Analysis

PORTLAND	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	87,491		87,205		89,064		90,972		1993	74,594	
Missing SSNs	4,177	4.8%	2,571	2.9%	3,202	3.6%	3,944	4.3%	1994	76,753	2.9%
Non-miss SSN Act Ind	83,314		84,634		85,862		87,028		1995	77,443	0.9%
EXACT Duplicates	1,867	2.2%	877	1.0%	875	1.0%	817	0.9%	1996	80,013	3.3%
Non-dup, Non-miss SSN	81,447		83,757		84,987		86,211		1997	81,900	2.4%
Add back missing	85,624	-2.1%	86,328	-1.0%	88,189	-1.0%	90,155	-0.9%	1998	86,328	5.4%
FINAL USER POP	85,624		86,328		88,189		90,155		1999	88,189	2.2%
									2000	90,155	2.2%
										Avg Annual Chg 93-97	2.4%
										Avg Annual Chg 98-00	2.2%

TUCSON	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	23,172		22,540		23,030		23,357		1993	19,707	
Missing SSNs	1,989	8.6%	1,239	5.5%	1,415	6.1%	1,651	7.1%	1994	20,662	4.8%
Non-miss SSN Act Ind	21,183		21,301		21,615		21,706		1995	21,474	3.9%
EXACT Duplicates	1,056	5.0%	339	1.6%	324	1.5%	297	1.4%	1996	22,463	4.6%
Non-dup, Non-miss SSN	20,127		20,962		21,291		21,409		1997	20,843	-7.2%
Add back missing	22,116	-4.6%	22,201	-1.5%	22,706	-1.4%	23,060	-1.3%	1998	22,201	6.5%
FINAL USER POP	22,116		22,201		22,706		23,060		1999	22,706	2.3%
									2000	23,060	1.6%
										Avg Annual Chg 93-97	1.4%
										Avg Annual Chg 98-00	1.9%

EXACT Unduplication Analysis for FY1998, FY1999, and FY2000
 EXACT: SSN, Date of Birth, Last Name, and First Name
 Analysis Excludes Missing SSNs from Unduplication Analysis

PHOENIX	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	135,590		126,699		130,361		133,495		1993	114,202	
Missing SSNs	9,529	7.0%	5,784	4.6%	6,838	5.2%	8,317	6.2%	1994	116,518	2.0%
Non-miss SSN Act Ind	126,061		120,915		123,523		125,178		1995	118,526	1.7%
EXACT Duplicates	6,611	5.2%	138	0.1%	141	0.1%	163	0.1%	1996	123,017	3.8%
Non-dup, Non-miss SSN	119,450		120,777		123,382		125,015		1997	126,085	2.5%
Add back missing	128,979	-4.9%	126,561	-0.1%	130,220	-0.1%	133,332	-0.1%	1998	126,561	0.4%
FINAL USER POP	128,979		126,561		130,220		133,332		1999	130,220	2.9%
									2000	133,332	2.4%
										Avg Annual Chg 93-97	2.6%
										Avg Annual Chg 98-00	2.7%

ABERDEEN	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	117,017		119,346		121,411		121,841		1993	104,443	
Missing SSNs	7,192	6.1%	4,846	4.1%	5,701	4.7%	6,751	5.5%	1994	107,237	2.7%
Non-miss SSN Act Ind	109,825		114,500		115,710		115,090		1995	108,745	1.4%
EXACT Duplicates	1,665	1.5%	2,383	2.1%	2,543	2.2%	2,475	2.2%	1996	111,389	2.4%
Non-dup, Non-miss SSN	108,160		112,117		113,167		112,615		1997	112,384	0.9%
Add back missing	115,352	-1.4%	116,963	-2.0%	118,868	-2.1%	119,366	-2.0%	1998	116,963	4.1%
FINAL USER POP	115,352		116,963		118,868		119,366		1999	118,868	1.6%
									2000	119,366	0.4%
										Avg Annual Chg 93-97	1.9%
										Avg Annual Chg 98-00	1.0%

EXACT Unduplication Analysis for FY1998, FY1999, and FY2000
EXACT: SSN, Date of Birth, Last Name, and First Name
Analysis Excludes Missing SSNs from Unduplication Analysis

ALASKA	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	111,252		122,533		128,493		128,292		1993	86,988	
Missing SSNs	7,820	7.0%	3,660	3.0%	4,750	3.7%	5,640	4.4%	1994	94,515	8.7%
Non-miss SSN Act Ind	103,432		118,873		123,743		122,652		1995	97,545	3.2%
									1996	101,699	4.3%
EXACT Duplicates	9,172	8.9%	6,123	5.2%	7,071	5.7%	6,536	5.3%	1997	104,412	2.7%
Non-dup, Non-miss SSN	94,260		112,750		116,672		116,116		1998	116,410	11.5%
Add back missing	102,080	-8.2%	116,410	-5.0%	121,422	-5.5%	121,756	-5.1%	1999	121,422	4.3%
FINAL USER POP	102,080		116,410		121,422		121,756		2000	121,756	0.3%
										Avg Annual Chg 93-97	5.0%
										Avg Annual Chg 98-00	2.3%

ALBUQUERQUE	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	85,398		85,193		86,322		87,935		1993	75,844	
Missing SSNs	2,804	3.3%	1,088	1.3%	1,451	1.7%	1,957	2.2%	1994	78,378	3.3%
Non-miss SSN Act Ind	82,594		84,105		84,871		85,978		1995	79,641	1.6%
									1996	80,554	1.1%
EXACT Duplicates	3,455	4.2%	3,342	4.0%	3,417	4.0%	3,327	3.9%	1997	81,052	0.6%
Non-dup, Non-miss SSN	79,139		80,763		81,454		82,651		1998	81,851	1.0%
Add back missing	81,943	-4.0%	81,851	-3.9%	82,905	-4.0%	84,608	-3.8%	1999	82,905	1.3%
FINAL USER POP	81,943		81,851		82,905		84,608		2000	84,608	2.1%
										Avg Annual Chg 93-97	1.7%
										Avg Annual Chg 98-00	1.7%

EXACT Unduplication Analysis for FY1998, FY1999, and FY2000
EXACT: SSN, Date of Birth, Last Name, and First Name
Analysis Excludes Missing SSNs from Unduplication Analysis

BEMIDJI	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	80,208		80,614		82,723		84,446		1993	62,057	
Missing SSNs	3,710	4.6%	2,172	2.7%	2,802	3.4%	3,738	4.4%	1994	66,262	6.8%
Non-miss SSN Act Ind	76,498		78,442		79,921		80,708		1995	69,576	5.0%
									1996	73,894	6.2%
EXACT Duplicates	1,079	1.4%	1,079	1.4%	1,106	1.4%	1,010	1.3%	1997	76,199	3.1%
Non-dup, Non-miss SSN	75,419		77,363		78,815		79,698		1998	79,535	4.4%
Add back missing	79,129	-1.3%	79,535	-1.3%	81,617	-1.3%	83,436	-1.2%	1999	81,617	2.6%
FINAL USER POP	79,129		79,535		81,617		83,436		2000	83,436	2.2%
										Avg Annual Chg 93-97	5.7%
										Avg Annual Chg 98-00	2.5%

BILLINGS	Official 98	%	New 1998	%	FY 1999	%	FY 2000	%	Year	User Pop	% Change
Active Indians	69,059		66,130		66,853		67,743		1993	60,021	
Missing SSNs	2,562	3.7%	1,211	1.8%	1,569	2.3%	1,998	2.9%	1994	61,528	2.5%
Non-miss SSN Act Ind	66,497		64,919		65,284		65,745		1995	62,395	1.4%
									1996	63,446	1.7%
EXACT Duplicates	2,748	4.1%	24	0.0%	25	0.0%	26	0.0%	1997	64,780	2.1%
Non-dup, Non-miss SSN	63,749		64,895		65,259		65,719		1998	66,106	2.0%
Add back missing	66,311	-4.0%	66,106	-0.0%	66,828	-0.0%	67,717	-0.0%	1999	66,828	1.1%
FINAL USER POP	66,311		66,106		66,828		67,717		2000	67,717	1.3%
										Avg Annual Chg 93-97	2.0%
										Avg Annual Chg 98-00	1.2%